

CostWorks Models

Why we recommend
CostWorks for RPV
estimating!

Notes:

- This presentation covers many of the unique features of the DOE CostWorks program. Most attendees had received CostWorks training in 2005 and were familiar with the program features. The presenter wanted to show some additional features he had used in testing Release 2.0 and how easy it is to “engineer” an RPV estimate for direct entry into the FIMS Building and OSF fields.
- CostWorks has features that improve model development accuracy and flexibility over more static model programs from DOD and Whitestone. Accuracy is improved with more location options that adjust the cost on individual program assemblies/work breakdown structures. (See the CostWorks Location/Geographic Spreadsheet and observe the range of adjusters vs the weighted average cost adjuster used in FIMS. The Sitework adjuster would be used for OSF estimates.) DOE has over 121 building and OSF models available for users, 92 of which were customized for DOE assets.
- Users can select as many as 6 structural systems and match the model with the design GSF to achieve economies of scale. Many common items can easily be added to the model from a common item list that changes with building usage codes. Parameters and assemblies can be customized and components easily swapped to modify capacity, dimensions, and quality.
- CostWorks Estimator reports can easily be edited and formatted to site special needs and cost markups. Data is exported to CAIS and FIMS.
- CostWorks can “engineer” a total Replacement Plant Value estimate by creating site factor markups and selecting the appropriate location on the Settings Screen. This feature enables the sites to easily estimate Building and OSF RPVs. (FIMS does not have an OSF RPV calculation formula). FIMS accepts “engineered” RPVs as official costs. An Excel version of a CostWorks Estimator is depicted in the Security-Towers attachment. Two summary reports are included that use CostWorks Estimator data. The RPV reports are for an Electric Transmission and Distribution System and Fencing OSF. Take a look!

Model Cost Accuracy

CostWorks Settings Screen

- Location Option
- Regional adjustments by Zip Code or City
- Up to 18 Assemblies in CostWorks can have unique adjusters.

Model Cost Accuracy

Model Inventory

- 29 RS Means Standard Models
- 34 Custom DOE Models
 - Includes 4 Pantex models
- 7 OSF plant models
- 51 OSF models
- 121 models available for use in CostWorks.

Model Design Flexibility

Structural Systems

- Six (6) exterior wall & structural systems.
- Match model GSF to actual GSF.
- Add or match common items to the model i.e. security systems, backup generators, elevators etc.

Model Design Flexibility

Parameter Customization

- CostWorks allows the following customization:
 - Perimeter adjustment
 - Number of stories
 - Story height
 - Partition density
 - Height
 - Door Density
 - Project cost markups

Model Design Flexibility Estimator

- Creation of custom line items.
- Permits editing of:
 - Line items (assemblies)
 - Quantities

Model Design Flexibility Component Swapping

- Easily swap or modify an existing assembly.
 - Capacity
 - Type
 - Material
 - Thickness
 - Quality
- Permits matching the model with the asset thus improving the accuracy of the RPVs.

Model Design Flexibility

Custom Reports

- Design custom report templates.
- Permits changes in...
 - Headers
 - Columns
 - Markup adjusters

CostWorks RPV Estimating Capability

Current Status:

- CostWorks can manually estimate RPV for buildings and OSFs.
- Users add markups and custom reports features.
- Values become “engineered” costs in FIMS.

CostWorks RPV Estimating Capability

- Sites use Location option to adjust for geography.
- Preliminary Cost Report:
 - Add a Site Factor markup to Parameters screen.
 - Manually enter data in FIMS in appropriate RPV field.

CostWorks RPV Estimating Capability

- Estimator Cost Report:
 - Create a new report with header property information

CostWorks RPV Estimating Capability

- Estimator Cost Report:
 - Create new Markups
 - Site Base Cost
 - Title "Site Base Cost"
 - Site Factor
 - Title "Site Factor (xx%)"
 - Sub-totalRPV
 - Title "RPV Estimate"
 - Manually enter data in FIMS in appropriate RPV field.

CostWorks Enhancement

- Objective – Give sites the option to have CW develop RPV estimates or Nat. Ave. Costs for FIMS calculation.
- Enhancement:
 - Use all CostWorks tools to improve RPV estimates accuracy.
 - Develop a methodology/report for Building & OSF RPV estimating.

CostWorks Enhancement

- Make the Preliminary Cost Report costs cumulative.
- Export costs directly to the FIMS building or structure **RPV** fields.
- Add a CostWorks checkbox to the FIMS RPV screens to identify source of estimate.